was not enough water for irrigating the second Paddy crops and the ryots had to resort to lift irrigation, even in places where assured supply was available every year. This was quite unusual. During October 1957 there was heavy rainfall in the State. This rainfall was helpful for Rabi sowings in parts of Bangalore and Chitradurga Districts. It was reported that this heavy rainfall was responsible for some damage to Khariff crops, viz, Paddy, Sugarcane, Bajra, Jowar and Groundnut in parts of Belgaum, Bidar and Bijapur Districts. Tur, Mong Mash, Paddy, Jola and Bajra crops were also affected to a considerable extent in some taluks of Gulbarga District particularly in Chincholi and Serum Taluks. The rain received during November was also heavy. In Dharwar District, Khariff Jowar, Groundnut and Cotton were reported to be damaged due to this heavy and excessive rains. The harvested paddy crop was affected in North Kanara District. This heavy rainfall delayed the agricultural operations for sowing of Rabi crops in Belgaum District. But these rains though beneficial to some extent, did not bring appreciable improvement in the condition of standing Khariff crops in Bangalore, Kolar and Tumkur Districts with the result the drought conditions continued. There was no rain during December 1957 in the State except some very light showers in parts of Mysore, Hassan and Chickmagalur Districts. Standing Rabi crops throve well. During January and February 1958 there were some showers in Bangalore, Mysore, Mandya, Tumkur and Hassan Districts.

(ii) Agriculture

Agricultural Season and Crop Conditions.

817. The Agricultural season in the State may be termed as normal.

818. The Rabi season was fairly a better season compared to the khariff season, in that good rains were received and helped to revive the crop position. However, heavy rains during this season affected some portions of North Kanara and Dharwar. At the same time lack of rains at this time affected the paddy crop in Coorg.

819. In short, the rains were unevenly distributed throughout the year due to which production was affected. However, there was sufficient produce in the markets to

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keep the prices stable and there was not much of fluctuation.

820. Consequent on the low yields of cotton in Dharwar, jowar in Gulbarga, groundnut in Raichur and paddy in Shimoga and Hassan Districts there was marked rise in the prices of the above commodities. These came down with the fresh arrivals of the subsequent season.

Agricultural Education.

821. There were 2 Agricultural Colleges, 3 Basic Agricultural Schools and 5 Agricultural Schools in the State during the year to impart Agricultural Education.

822. Inspite of these institutions, there was a growing demand for Agricultural Education and the Department was trying its best to cope up with the same.

823. Agricultural College, Hebbal, Bangalore.—The strength of the college was 271. As many as 531 candidates had sought admission at the beginning of the year.

824. As per Government's decision dated 27th November 1957, admissions to the Diploma course ceases from the next academic year *i.e.*, 1958-59.

825. The College has been included under Region No. V of the T.C.M. Programme and is receiving assistance by way of books and equipment. The teaching programme receives the guidance of Dr. Erven J. Long, Group Leader of the University of Tennessee and Dean J. H. Mc Leod. In viev of the increased strength, Government were also pleased to double the Merit and Backward Community Scholarships from 3 and 27 to 6 and 54 respectively. In addition, 37 freeships and 58 half-freeships were awarded during the year.

826. Agricultural College, Dharwar.—The total number of students on the rolls during the year were 315 and 16 post-graduate students (12 students for M.Sc., 4 students for Ph. D.,).

827. Four students received the Backward Class Scholarships from the Government of India and 6 students were awarded the same by the State Government.

828. The Agricultural Schools are (1) Basic Agricultural School, Bagalkot with a student strength of 65, (2) Basic Agricultural School, Devihosur with a student strength of 120, (3) Basic Agricultural School, Arbhavi

with 69 students on rolls, (4) Agricultural School, Kumta with 25 students admitted to the 1st year class, (5) Basic Agricultural School, Somanahalli with a student strength of 115, (6) R. K. Shala, Anekal with 59 students on rolls, (6) Basic Agricultural School, Gangavathi with a student strength of 112.

829. Entomolgy Section.—The Entomology section carried on studies towards the discoveries of new noxious and beneficial insects and in solving the problems of pest control. The parasite laboratory at Mandya serves as a centre for the large scale releases of Trichogramma parasite. It also serves as a demonstration and propaganda centre for sugarcane borer control in the V. C. tract. Plant Protection.

830. Plant Pathology Section.—During the year, training was given to the candidates attending the free Horticultural classes at the Lalbagh, Bangalore. The students of the Basic Agricultural Schools at Ramakrishnapur, Somanahally, V. C. Farm, Mandya and at Hebbal were also given training during the course of the year on plant pathology particularly on diseases of crop, plants and their control measures.

831. The section undertook study and research problems during the year.

832. Chemicals and equipment.—A sum of Rs. 53,943—78 was spent on the purchase of different pesticides. The cost of equipment purchased was Rs. 35,421. These were sold to the Agriculturists at 50 per cent concession. Equipment, sprayers, dusters, both ordinary and power worked were issued to the Agriculturists free of cost for use and safe return. These were made available in all the districts. Further chemicals were purchased under 'F' advances to make them readily available at cost price to Agriculturists.

833. Incidence of pests and diseases.—During the year, almost all the pests and diseases of several crops made their appearance throughout on a devastating scale.

843. The Urban Compost Scheme was operative in all places with organised sanitary system as Panchayats, Municipalities, District Boards, Cantonment Boards and Notified area Committees with a population of 5,000 and above. The scheme at present is an aided scheme, receiving aid and grants from the Government of India. Compost Section.

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835. During the year against a target of 2-lakh tons a quantity of 2,07,850 (1,47,348) tons of compost was produced from the town refuse including the compost from other sources. The quantity of compost distributed during the year was 1,67,084 (92,042) tons. There were in all 289 towns in the State with a total population of 44,55,895. The total number of centres preparing the compost at the end of the year was 191. It was estimated that the total acreage benefited from the compost was 41,570.

836. The sewage farm at Mysore City continued to serve as an example and the municipal authorities completed the sewering of the unsewered areas. The farm was producing good fruit crops.

837. Under the rural compost scheme, a total number of 23,617 compost trenches were newly dug. The number brought into service during the year was 29,331 and the quantity of compost prepared was 6,91,719 tons.

Agricultural Farms and Research Stations

838. There were in the State twenty-six agricultural farms and research stations and about 14 stations for special crops as the main programme and other crops as subsidiary part of the farm.

Oil Seeds Research Station, Raichur.

839. This Research Station was launched by the Indian Central Oil Seeds Committee in October 1951, in collaboration with the State Government, with a view to make available to cultivators of Hyderabad Karnatak tract, improved varieties of high yielding and high oil content strains, the expenditure being shared on a 50 : 50 basis by the State Government and the Indian Central Oil Seeds Committee. Groundnut, Niger, Safflower and Linseed are major oil seed crops in this region covering nearly 1·4 million acres.

Extension work in the Divisions

Manures and Fertilisers.

840. *Bangalore Division.*—Among artificial manures, Am_2So_4 and Superphosphate were very popular. The chemical fertilisers were made available to the ryots through the medium of co-operative societies and wherever the societies were not functioning they were supplied through the departmental godowns. The green manure seeds were made available in the departmental depots.

841. Mainly improved varieties of seed paddy, ragi, cotton, jowar and groundnut were distributed to the ryots. Technical advice regarding use of improved implements were given to the ryots. Tractors, bulldozers and lorries were hired out to the needy ryots for the purpose of ploughing, levelling and transport of composts, etc.

Improved varieties of seeds.

842. The ryots have been induced to take up a second cropping to tide over the scarcity of foodgrains, wherever facilities exist. The total area under second cropping during summer 1958 was 45,970 acres.

Second cropping.

843. This has gained popularity on account of the encouraging results obtained by the ryots. The area covered under this method in this Division was 98,396 acres.

Japanese Method of Paddy Cultivation.

844. *Line Planting.*—The ryots have been made to understand the advantages of line planting over drilling or broadcasting. Row planting of paddy and ragi was becoming popular. In dry areas adopting lesser seed rate was gaining popularity.

845. During the year, an area of 50,628 acres was protected against pests and diseases in this Division.

Plant Protection.

846. There were four Agricultural Colonies in the Division with a membership of 46 and embracing a total cultivable area of over 600 acres. The object is to encourage educated unemployed youngmen to join in team work and undertake farming on improved lines.

Agricultural Colonies.

847. *Mysore Division.*—Japanese method of rice cultivation was practised in all the districts. Modified Japanese method to suit local conditions was gaining momentum. The area under cultivation under this method was 1,40,443 acres.

488. Fertilisers to the extent of 7,442 tons were distributed during the year. Green manuring was advocated on a large scale. Green manure seeds like glyrecedia, sunnhemp, sesbania and dhaincha were distributed to ryots in all the districts. Mysore District was procuring and supplying glyrecedia and sunnhemp seeds to the entire State. Application of phosphatic fertilizers was advocated and an area of 2,780 acres was covered in Shimoga District. Fertiliser application to areca gardens and sugarcane was popularised.

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849. Improved varieties of seeds were supplied to the ryots in this Division.

850. Preparation of rural and urban compost was taken on an intensive scale.

851. Use of improved agricultural implements like ploughs, Japanese rotary weeders, cultivators, etc., were becoming very popular and were supplied through the Departmental agencies and co-operative societies.

852. In Shimoga District, 250 soil samples were got tested and necessary recommendations were given for improving the same. Drill sowing has been taken up by many farmers. An area of 2 lakhs acres were cultivated by drill sowing in Shimoga District.

853. Demonstrations on various improved methods of Agriculture like, ear-head selections, Japanese method of paddy cultivation, fertilizer application, varietal, plant protection, etc., were held in the ryots holdings. Economic seedlings like cashewnut, cocoanut, prosopis juliflora, etc., were distributed to the ryots.

854. Lift irrigation was becoming popular in maidan areas of the Division.

855. Farmers' Forum was functioning both at District and Taluk levels.

856. *Dharwar Division.*—Generally, conditions of Agriculture was fair all over the Division. Scarcity of labour was experienced in Malnad Districts.

857. Remedial measures for crop diseases and pests were undertaken wherever they were reported. Insecticides and appliances were made available free of cost to the cultivators. The Bombay Crop Pests and Diseases Act was enforced in the affected villages of Belgaum and Chikkodi Taluks.

858. Improved varieties of seeds of paddy, khariff jowar, groundnut, rabi jowar, wheat, gram, cotton, tobacco were supplied to the ryots of the Division.

859. Some of the co-operative societies have taken up procurement and distribution of fertilizers and other agricultural requisites.

860. An Agricultural Museum has been constructed by the District Agricultural Association.

861. There was no regular scheme for supply of implements. Under the scheme for introduction of dry farming practices in the bunded area, 133 yokes were supplied for 133 sets of seed drills, hoes, etc.

862. An area of 26,336 acres was brought under Japanese method of paddy cultivation.

863. *Raichur Division.*—Improved strains of paddy and cotton were very popular. Already 80 per cent of the area under paddy and 85 per cent under cotton were under improved strains.

864. During the year, a quantity of 11,391 mds. of improved seeds were distributed to the ryots.

865. Through the Panchayats, Co-operative Societies and Agricultural Associations, a quantity of 7,225 tons of compost from town sweepings and night soil was arranged and supervised by different staff. An amount of Rs. 11,019-84 was paid as subsidy to ryots, in order to give encouragement to the preparation of night soil compost. Planting of seedlings of economic trees in Panchayat vacant sites was arranged as part of the activities of the department during Vanamohotsava.

866. Agricultural Associations were formed in every village and periodical meetings were held. Subvention farm and demonstration plots were arranged through the help of these associations. During the association meeting all methods of improved agriculture were explained to the ryots.

867. Farmers' Forum was organized especially in the N.E.S. and Community Development Project Blocks and also some of the schools in the Division to disseminate scientific knowledge to young formers and students.

868. Facilities were offered to ryots for sinking new wells and repairs to old ones with a view to increase area under irrigated farming and ensure higher production. During the year, 154 wells were dug and 99 old wells repaired.

869. To stop the menace of soil erosion, which was turning the vast areas of Agricultural lands into barren fields by washing away the fertile top soil from the field, contour bunding work was resorted to, as an integral part of the departmental programme.

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870. A total of 1,62,725 tons of compost was manufactured during the year.

871. Intensive drive was launched to make the conservative cultivator manure minded. In addition to demonstration plots arranged on Government Farms, a net work of memorial demonstration plots were arranged to exhibit the manuring of crop both under rain-fed and irrigated condition on the cultivators field.

872. During the year, 9,712 acres were brought under Japanese method of paddy cultivation in Bellary and Gangawati areas.

873. As usual, crop competitions were organised throughout the Division to create healthy competitive spirit amongst the cultivators.

874. The 8th Annual Vanamahotsava was celebrated during July 1957.

875. To disseminate the latest scientific knowledge in Agriculture, Refresher Training classes and Farmers' Training classes were arranged. Exhibition and Farmers' Day were conducted, depicting the several aspects of Agricultural activities in the form of photos, charts, models and graphs.

876. As a result of various campaigns sponsored by the Department of Agriculture to achieve increased production, an area of roughly about 20,58,000 acres was brought under improved methods of cultivation and an additional production of more than 37,000 tons of Agricultural produce.

(iii) Forest.

877. The forest area of the State was 13,556·68 square miles at the end of the year. Out of this total forest area, 12,111·81 square miles were in charge of the Forest Department and 1,444·87 square miles in charge of the Revenue Department.

Free Grazing

878. Free grazing was allowed in all the Divisions of the old Mysore State (excepting in Bellary Division) except in areas under regeneration and worked coupes. In Bellary, Gulbarga, Kollegal and South Kanara Divisions cattle were allowed to graze on prepaid licenses.